

APPENDIX A

Version with markings to show changes made

1. (Amended) A method of forming a multiple semiconductor device stack apparatus comprising:

providing a substrate;

providing a first semiconductor device having at least one bond pad on an active surface thereof;

mounting and electrically connecting said first semiconductor device to said substrate;

providing a first interposer device;

mounting said first interposer device to said first semiconductor device, on a side opposite said substrate, said first interposer device having a first surface of a first area and a second surface of a second area less than said first area with a first pair of recesses formed on opposing edges of said first interposer device thus exposing [the] said at least one bond pad on [the] said active surface of [the] said first semiconductor device, said second surface mounted to [the] said active surface of [the] said first semiconductor device;

providing a second semiconductor device; and

mounting said second semiconductor device on [the] said first surface of said first interposer device, opposite said first semiconductor device and electrically connecting said second semiconductor device to either said first semiconductor device[,] or to said substrate[,] or both.

2. (Amended) The method of forming a multiple semiconductor device stack apparatus according to claim 1, further comprising:

providing a second interposer device having a first side and a second side; and

[mounted] mounting said second interposer device to said second semiconductor device on said first side, wherein said second interposer device includes a bond pad recess opening for

allowing connection between either said first and second semiconductor devices or between said semiconductor devices and said substrate[,] or both.

3. (Amended) A method of forming a multiple semiconductor device stack apparatus comprising:
 - providing a substrate;
 - providing a first semiconductor device having at least one bond pad on [the] an active surface thereof;
 - mounting and electrically connecting said first semiconductor device to said substrate;
 - providing a first thermally conductive interposer device;
 - mounting said first thermally conductive interposer device to said first semiconductor device, on a side opposite said substrate, said first thermally conductive interposer device having a first surface of a first area and a second surface of a second area less than said first area with a first pair of recesses formed on opposing edges of said first thermally conductive interposer device thus exposing [the] said at least one bond pad on [the] said active surface of [the] said first semiconductor device, said second surface mounted to [the] said active surface of [the] said first semiconductor device;
 - providing a second semiconductor device; and
 - mounting said second semiconductor device on [the] said first surface of said first thermally conductive interposer device, opposite said first semiconductor device and electrically connecting said second semiconductor device to either said first semiconductor device[,] or to said substrate[,] or both.

4. (Amended) The method of claim 3, further comprising:
 - providing a second interposer device having a first side and a second side; and
 - mounting said second interposer device to said second semiconductor device on said first side thereof, wherein said second interposer device includes a bond pad recess opening for

allowing connection between either said first and second semiconductor devices or between said semiconductor devices and said substrate[,] or both.

9. (Amended) A method for forming a stack of multiple semiconductor devices comprising:

providing a substrate;

providing a first semiconductor device having at least one bond pad on an active surface thereof; mounting and electrically connecting said first semiconductor device to said substrate;

providing a first interposer device;

mounting said first interposer device to said first semiconductor device, on a side opposite said

substrate, said first interposer device having a first surface of a first area and a second surface of second area less than said first area with a first pair of recesses formed on opposing edges of said first interposer device thus exposing [the] said at least one bond pad on [the] said active surface of [the] said first semiconductor device, said second surface mounted to [the] said active surface of [the] said first semiconductor device;

providing a second semiconductor device; and

mounting said second semiconductor device on [the] said first surface of said first interposer device, opposite said first semiconductor device and electrically connecting said second semiconductor device to either said first semiconductor device[,] or to said substrate[,] or both.

10. (Amended) The method of claim 9, further comprising:

providing a second interposer device having a first side and a second side; and

[mounted] mounting said second interposer device to said second semiconductor device on said first side, wherein said second interposer device includes a bond pad recess opening for allowing connection between either said first and second semiconductor devices or between said semiconductor devices and said substrate[,] or both.

11. (Amended) A method of forming a stack of semiconductor devices comprising:
providing a substrate;
providing a first semiconductor device having at least one bond pad on [the] an active surface thereof;
mounting and electrically connecting said first semiconductor device to said substrate;
providing a first thermally conductive interposer device;
mounting said first thermally conductive interposer device to said first semiconductor device, on a side opposite said substrate, said first thermally conductive interposer device having a first surface of a first area and a second surface of a second area less than said first area with a first pair of recesses formed on opposing edges of said first thermally conductive interposer device thus exposing [the] said at least one bond pad on [the] said active surface of [the] said first semiconductor device, said second surface mounted to [the] said active surface of [the] said first semiconductor device;
providing a second semiconductor device; and
mounting said second semiconductor device on [the] said first surface of said first thermally conductive interposer device, opposite said first semiconductor device and electrically connecting said second semiconductor device to either said first semiconductor device[,] or to said substrate[,] or both.

12. (Amended) The method of claim 11, further comprising:
providing a second interposer device having a first side and a second side; and
mounting said second interposer device to said second semiconductor device on said first side thereof, wherein said second interposer device includes a bond pad recess opening for allowing connection between either said first and second semiconductor devices or between said semiconductor devices and said substrate[,] or both.

14. (Amended) The method of claim [11] 12, wherein said second interposer device comprises a thermally insulative interposer.

15. (Amended) The method of claim [11] 12, wherein said second interposer device comprises a thermally conductive and thermally insulative interposer.